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| APPLICATION NO. | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|-----------------|---------------|----------------------|----------------------|------------------|
| 09/841,657      | 04/24/2001    | Duncan M. Kitchin    | INTL-0405-US (P8988) | 6439             |
| 7590 11/17/2004 |               |                      | EXAMINER             |                  |
| Timothy N. Trop |               |                      | IYER, RAMAKRISHNA R  |                  |
| TROP, PRUNE     | ER & HU, P.C. |                      | <u></u>              |                  |
| STE 100         |               |                      | ART UNIT             | PAPER NUMBER     |
| 8554 KATY FWY   |               |                      | 2663                 |                  |
| HOUSTON, T      | X 77024-1805  |                      |                      |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                           | <b>K</b>                                                                                             |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Application No. Applicant(s)                                                                                                                                                              |                                                                                                      |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 09/841,657                                                                                                                                                                                | KITCHIN, DUNCAN M.                                                                                   |  |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Examiner                                                                                                                                                                                  | Art Unit                                                                                             |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Raju lyer                                                                                                                                                                                 | 2663                                                                                                 |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ears on the cover sheet with the c                                                                                                                                                        | orrespondence address                                                                                |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was a really a reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | iely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). |  |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 1) Responsive to communication(s) filed on 24 Ag                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | oril 2001.                                                                                                                                                                                |                                                                                                      |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | action is non-final.                                                                                                                                                                      |                                                                                                      |  |  |  |  |
| 3) Since this application is in condition for allowan                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                           | secution as to the merits is                                                                         |  |  |  |  |
| closed in accordance with the practice under E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 4) Claim(s) 1-17 is/are pending in the application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | vn from consideration.                                                                                                                                                                    |                                                                                                      |  |  |  |  |
| 5) Claim(s) <u>18-30</u> is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 6)⊠ Claim(s) <u>1-3,10,15 and 16</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 7) Claim(s) <u>4-9,11-14,17</u> is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 9)⊠ The specification is objected to by the Examiner. ¯                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>24 April 2001</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| Applicant may not request that any objection to the                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | drawing(s) be held in abeyance. See                                                                                                                                                       | 37 CFR 1.85(a).                                                                                      |  |  |  |  |
| Replacement drawing sheet(s) including the correcti  11) The oath or declaration is objected to by the Ex-                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                           | ` '                                                                                                  |  |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| 12)  Acknowledgment is made of a claim for foreign                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | priority under 35 U.S.C. & 119(a)                                                                                                                                                         | -(d) or (f)                                                                                          |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | priority arraor oc c.c.c. 3 1 10(a)                                                                                                                                                       | (4) 6. (1).                                                                                          |  |  |  |  |
| 1. Certified copies of the priority documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | s have been received                                                                                                                                                                      |                                                                                                      |  |  |  |  |
| 2. Certified copies of the priority documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                           | on No                                                                                                |  |  |  |  |
| 3. Copies of the certified copies of the prior                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | , ,                                                                                                                                                                                       |                                                                                                      |  |  |  |  |
| application from the International Bureau                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | •                                                                                                                                                                                         |                                                                                                      |  |  |  |  |
| * See the attached detailed Office action for a list of                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | • • • • • • • • • • • • • • • • • • • •                                                                                                                                                   | d.                                                                                                   |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                           | •                                                                                                    |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                           |                                                                                                      |  |  |  |  |

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

1) X Notice of References Cited (PTO-892)

| 4) Interview Summary (PTO-413)                     |  |
|----------------------------------------------------|--|
| Paper No(s)/Mail Date                              |  |
| 5) Notice of Informal Patent Application (PTO-152) |  |

6) 🔲 Other: \_

#### **DETAILED ACTION**

# Specification

- 1. The disclosure is objected to because of the following informalities:
  - On page 9, line 19, "the" should be "then";
  - In the description of Fig. 5 on page 16, lines 1-19, blocks 510(4) and 520(1) are mentioned in the text, but not shown in Fig. 5.

    These blocks are incorrectly labeled as 520(4) and 520(2) in the figure. Appropriate correction is required in Fig. 5.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by as being anticipated by US Patent Number 6,009,106 ("Rustad et al").

Regarding Claim 1, Rustad et al disclose a communication device that consists of an interface to transmit data to a receiving device and has a controller communicatively coupled to the interface (see Fig. 6). Rustad et al further teach that the controller detects changes to the bit rate transmit/receive status of the channel (e.g. Col. 4, lines 57-63; Co. 9, lines 45-60; and Col. 17, lines 7-12) and

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and adjusts the bandwidth of the transmitted switched (reserved) and unswitched (unreserved) data in response to detecting changes to the transmitted bit rates. Therefore the limitation described in Claim 1 is judged to have been anticipated by Rustad et al.

4. Regarding Claim 10, Rustad discloses that the controller "could consist of central processing unit and a control program stored in program memory" (Col. 10, lines 26-29). Therefore, the limitation described in Claim 10 is judged to have been anticipated by Rustad et al, in view of this disclosure, and further as applied to the limitations of Claim 1 above.

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- 7. Claims 2, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rustad et al in view of US Patent Number 6,154,643 ("Cox").
- 8. Regarding Claim 2, Rustad et al do not disclose wireless as the transmission medium in their invention, but disclose all other limitations as applied to Claim 1 above (paragraph 1).

Cox, in his invention, discloses a system and method of operating at different bandwidths over a radio (wireless) link (Fig. 2, and Col. 4, lines 52-65).

A person of ordinary skill in the art would have been motivated to employ Cox in Rustad et al, since wireless transmission channel has limited bandwidth and efficient use of this bandwidth to accommodate bit rate changes apply equally well to wireless as they do to copper or other transmission channels.

At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to combine Cox with Rustad et al (collectively "Rustad-Cox") to obtain the invention as specified in Claim 2.

9. Regarding Claim 15, Rustad et al do not disclose wireless as the transmission medium in their invention, but disclose all the other limitations as applied to Claim 10 above (paragraph 2).

Cox, in his invention, discloses a system and method of operating at different bandwidths over a radio (wireless) link (Fig. 2, and Col. 4, lines 52-65).

A person of ordinary skill in the art would have been motivated to employ Cox in Rustad et al, since wireless transmission channel has limited bandwidth and efficient use of this bandwidth to accommodate bit rate changes apply equally well to wireless as they do to copper or other transmission channels.

At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to combine Cox with Rustad et al (collectively "Rustad-Cox") to obtain the invention as specified in Claim 15.

- 10. Regarding Claim 16, Rustad-Cox disclose all the limitations of the claim as applied to Claim 1 above (paragraph 1) and Claim 15 above (paragraph 7).
- 11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rustad-Cox et al as applied to Claim 1 and 2 above (paragraph 1 and 4), and further in view of US Patent Application Publication Number US2003/0084184 A1 ("Eggleston et al"). Rustad-Cox do not disclose the wireless interface comprising a wireless network card.

Eggleston et al, in their publication, disclose a wireless user device (portable computer) with a radio frequency (wireless) modem that is implemented on a wireless network card (Fig. 1, and paragraph 0023, page 2).

A person of ordinary skill in the art would have been motivated to employ Eggleston et al in Rustad-Cox, since implementation of wireless and logic circuits Application/Control Number: 09/841,657

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on network cards is economical as well as necessary from a production standpoint, when the volume requirements of the devices are high.

At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to combine Rustad-Cox with Eggleston et al (collectively "Rustad-Cox-Eggleston"") to obtain the invention as specified in Claim 3.

#### Allowable Subject Matter

- 12. Claims 4 –9, 11-14, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 13. Claims 18-30 are allowed.

#### Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (please see attachment).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raju Iyer whose telephone number is (571) 272 6047. The examiner can normally be reached on 7.30 a.m. - 4.00 p.m. on all weekdays except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272 3126. The

fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raju Iyer

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

/ lever T. Affryen